

## Technical Specifications

Model	OceanStor 18500	OceanStor 18800	OceanStor 18800F
Hardware specifications			
System architecture	Smart Matrix Architecture		
Max. number of controllers	8	16	16
Max. number of processors	Multi-core processors		
Max. cache size (GB)	768	3072	3072
Max. number of front-end host ports	96 (Fibre Channel/iSCSI/FCoE)	192 (Fibre Channel/iSCSI/FCoE)	192 (Fibre Channel/iSCSI/FCoE)
Max. number of disks	1584	3216	2304
Supported disk types	2.5-inch disks: SSD and SAS 3.5-inch disks: SSD, SAS, and NL-SAS		2.5-inch SSD
Software specifications			
Max. number of hosts	65,536		
Max. number of LUNs	65,536		
Data protection software	HyperSnap HyperClone HyperCopy HyperReplication S/A		
Storage efficiency software	SmartThin SmartMotion SmartTier SmartQoS SmartPartition SmartVirtualization		SmartThin SmartMotion SmartQoS SmartPartition SmartVirtualization
Host software	UltraAPM (multi-site DR management) UltraVR (virtualization DR management) UltraPath (host multipathing) DiskGuard (host data protection) SmartX Insight		
Compatible operating systems	AIX, HP-UX, Solaris, Linux, and Windows		
Supported virtual environment	VMware, XenServer, and Hyper-V virtual platforms VMware VAAI/VASA/SRM and Hyper-V ODX/TP value-added features vSphere and vCenter integration		
Physical specifications			
Power supply	System bay	AC 200 V to 240 V, 32 A, 50 or 60 Hz	
	Disk bay	AC 200 V to 240 V, 32 A, 50 or 60 Hz	
Dimensions and weight	Dimensions (H x W x D)	Maximum bay dimensions (including external pulleys and support feet): 1995 mm x 600 mm x 1100 mm	
	Weight	System bay: 658 kg (fully loaded with 2.5-inch disks)/654 kg (fully loaded with 3.5-inch disks) Disk bay: 570 kg (fully loaded)	574 kg (fully loaded)
Operating ambient temperature	5°C to 40°C (altitude: < 1800 m), 5°C to 30°C (altitude: 1800 m to 3000 m)		

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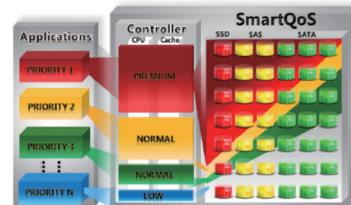
## Smart Series Offering Flexible and Efficient Storage

### SmartQoS — Easy Service Management

The SmartQoS classifies I/Os into priority-specific queues based on applications' priorities. Sufficient storage resources are reserved for I/O queues with high priorities to meet their performance requirements, while a resource upper threshold is set for I/O queues with low priorities to avoid excessive resource usage. The execution period of the SmartQoS policy is customizable.

### SmartPartition — Cache Partitioning

The SmartPartition sets target values for cache partitions. Based on the values, cache resources are dynamically and separately allocated to services to avoid malicious cache contention and ensure critical services' performance.

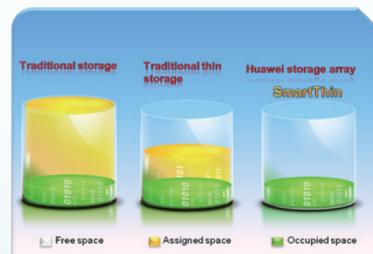


### SmartTier — Intelligent Data Tiering

The SmartTier uses different types of disks to create storage tiers and automatically migrates data among these tiers based on its I/O access frequency statistics. In doing so, data is stored onto the right storage medium at the right time, increasing system performance and decreasing TCO.

### SmartMotion — Balance Between Performance and Capacity

Within the same tier, the SmartMotion calculates I/O access frequencies and disk usage on different disks. Based on the generated statistics, the SmartMotion relocates data among disks of the same type to constantly maintain a balance between performance and capacity. The relocation prevents disk hot spots, boosts disk utilization, and raises the overall system performance. What's more, the SmartMotion helps ensure hitless system upgrade by redistributing disk performance and capacity.



### SmartThin — Intelligent Resource Distribution

The SmartThin allocates storage capacity on demand. Storage space is allocated and reclaimed in a unit of 64 KB. The SmartThin supports space reclamation for mainstream applications such as VMware, Veritas Storage Foundation, and Windows Server. Besides, it delivers space pre-distribution for thin LUNs, enabling switchover and data replication between thin and thick LUNs.

### SmartVirtualization — Heterogeneous Storage Virtualization

The SmartVirtualization consolidates and reuses legacy devices by enabling the Huawei Enterprise Storage system series to take over storage resources from existing third-party devices. All resources are managed in a unified manner to fully utilize existing storage space, simplify management, and maximize customers' ROI.

## Hyper Series Safeguarding Service Continuity

### HyperSnap

The HyperSnap generates snapshots of online data at specified points in time without interrupting system services. Those snapshots can be used for backup, R&D, testing, data mining, and data recovery in case data is lost due to virus infection or misoperations. A data snapshot occupies only changed data to save storage space.

### HyperClone

The HyperClone generates full physical copies (data mirrors) of a primary LUN. After synchronizing and splitting the primary LUN and secondary LUN, the HyperClone obtains data copies consistent with the primary LUN. A maximum of 16 physical copies of a primary LUN can be generated to apply to various application scenarios.

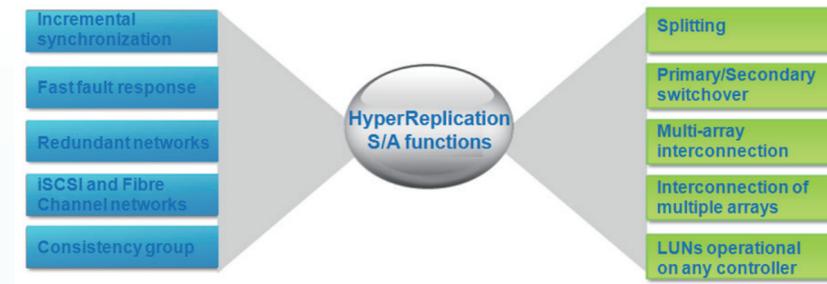
The HyperReplication /S mirrors data from a primary LUN to a secondary LUN on a different storage array. It applies to intra-city data protection and minimizes data loss risks.

### HyperReplication /A

The HyperReplication /A replicates data from a primary LUN to a secondary LUN in a remote location thousands of kilometers away. The minimum recovery time objective (RTO) is 5 seconds, minimizing data loss during system downtime. The data replication period can also be customized to off-peak hours to minimize adverse impact on application and host performance.

### HyperReplication /CG

The HyperReplication /CG creates a consistency group comprised of multiple data volumes that have share the same replication policy. The consistency group ensures data consistency among the member data volumes.



### UltraAPM

The UltraAPM provides application-level disaster recovery solutions to keep data consistent among applications. The software supports disaster recovery drill, incremental data synchronization, and centralized management. It can protect data on most mainstream applications, such as Oracle, DB2, and SQL Server.

### UltraVR

As a vCenter Server plug-in, the UltraVR works seamlessly with value-added functions of HUAWEI storage arrays. It delivers VMware-based one-stop service integrating backup, testing, and recovery and ensures speedy and highly predictable recovery point objective (RPO) and RTO.

## OceanStor 18500/ 18800/ 18800F Data Sheet

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